

Appl. No. 10/034,680
Docket No. 14X200155/QEM-0194

AMENDMENTS TO THE SPECIFICATION

Beginning on page 4, please amend paragraph [0018] as follows:

[0018] Figure 3 shows diagrammatically other images displayed according to an embodiment of the invention. The images on Figure 3 are side view images of a patient's breasts in a mammograph; the same reference numerals have been employed. Figure 3 shows that the breast shown in the first image 2, ~~to the left of the figure~~, is larger than the view of the breast on the second image 4 of Figure 3. This size difference can simply originate from differing manipulations when taking the images. In the embodiment of Figure 3, the right-hand breast may have been positioned differently from the left-hand breast when the images were taken. Two arrows 16 and 14 can also be seen on the images 2 and 4 and these indicate the respective positions of the tip of the breast on each image. In the embodiment of Figure 3, the position of the tip of the breast is used for aligning the regions of interest on the two images. The position of the tip of the breast can be determined using known image analysis techniques. For the alignment, the height in the image of this tip of the breast can simply be used. More generally, where the regions of interest of both images are not of the same size in the vertical direction, one can, for alignment purposes, optimize one image-dependent criterion, as a function of the relative height of the images. Such a criterion can be the result of computing correlation over the whole of the region of interest, or over a part of this region of interest. One could also proceed to correlate images in the area adjoining the tip of the breast. One could also proceed to align the contour of a breast or part of the contour of one breast with respect to the other breast. Such computations allow determination of the relative height for which this criterion is at its maximum; this height now corresponds to alignment of the regions of interest on both images. The result, shown in Figure 3, is that the images are, like in Figure 2, displayed so as to facilitate their comparison. The technique described with reference to Figure 3 is particularly useful when the regions of interest determined for the two images are not of the same size. They are now aligned by calculating an optimization

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criterion which depends on the relative position of the images, after which this criterion is optimized.